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EVALUATION OF DIGITAL
CORRECTION TECHNIQUES
FOR ERTS IMAGES

BIMONTHLY PROGRESS REPORT
NOVEMBER-DECEMBER 1973

CONTRACT NUMBER: NAS5-21814

Prepared for:

Goddard Space Flight Center
Greenbelt, Maryland 20771

(E7.4-10148) EVALUATION OF DIGITAL
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Bimonthly Progress Report, Nov - Dec
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TRW
SYSTEMS GROUP

NASA CONTRACT NO. NAS5-21814

Bimonthly Progress Report: November-December 1973

1.0 TITLE: Evaluation of Digital Correction Techniques for ERTS Images
Principal Investigator Identification Number: P520

2.0 PROGRESS DURING REPORTING PERIOD

2.1 Precision Processing

MSS scene 1062-15190 was processed by means of TRW's precision processing software, which utilizes Ground Control Points (GCP's) for attitude refinement (see Reference (1) for a more detailed description of the process). Recent experience indicates that the first GCP compensates effectively for image offset errors (arising from orbit phasing and attitude bias uncertainties). Two more GCP's effectively compensate for remaining attitude biases. Thus, 3 GCP's produce $< 100\text{m}$ mean absolute position error, with a corresponding $\sim 40\text{m}$ standard deviation. Three additional GCP's refine attitude rates so as to maintain this performance throughout the image.

3.0 PROBLEMS

None

4.0 PUBLISHED ARTICLES

A paper was presented to the Third ERTS Symposium (December 10-14, 1973 in Washington, D.C.), which contained material discussed in previous reports.

5.0 RECOMMENDATIONS

None

6.0 CHANGES IN PRODUCT ORDERS

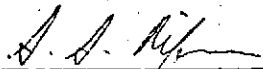
None

7.0 CHANGES IN PERSONNEL

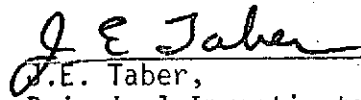
REFERENCES:

- (1) S.S. Rifman, "Evaluation of Digital Correction Techniques for ERTS Images - Interim Report for Period September 1972 - February 1973," TRW Document No. 20634-6001, RU-00, dated March 1973.

SSR:nc



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